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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,561	03/29/2004	Gabor Devenyi	03W002	1383
Raytheon Company 2000 East El Segundo Boulevard, EO/E04/N119			EXAMINER	
			JOYCE, WILLIAM C	
P.O. Box 902 El Segundo, CA 90245			ART UNIT	PAPER NUMBER
	-		3682	
			MAIL DATE	DELIVERY MODE
			07/10/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/811,561	DEVENYI, GABOR
Office Action Summary	Examiner	Art Unit
	William C. Joyce	3682
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO 136(a). In no event, however, may a reply be ti will apply and will expire SIX (6) MONTHS fron e, cause the application to become ABANDONI	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on <u>08 A</u> This action is FINAL . 2b) ☑ This Since this application is in condition for allowed closed in accordance with the practice under	s action is non-final. ance except for formal matters, pr	
Disposition of Claims		
4) ☐ Claim(s) 3-5 and 17-26 is/are pending in the a 4a) Of the above claim(s) 3 is/are withdrawn for 5) ☐ Claim(s) 21-26 is/are allowed. 6) ☐ Claim(s) 4 5 17-20 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	rom consideration.	
Application Papers		
9) The specification is objected to by the Examination 10) The drawing(s) filed on is/are: a) accomposed as a composition and accomposition and accomposition is objection to the Replacement drawing sheet(s) including the correct should be contacted as a composition of the correct should be contacted as a composition of the correct should be contacted as a composition of the correct should be contacted as a contact shou	cepted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	ee 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority document 2. ☐ Certified copies of the priority document 3. ☐ Copies of the certified copies of the priority document application from the International Bureat* * See the attached detailed Office action for a list	nts have been received. Its have been received in Applicat Prity documents have been receiv Bu (PCT Rule 17.2(a)).	tion No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	oate

DETAILED ACTION

This Office Action is in response to the amendment filed April 8, 2008 for the above identified patent application.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 4, 5, 17, and 20 are rejected under 35 U.S.C. 102(b as being anticipated by Neff (DE 198 31 940).

Neff teaches a screw device having a leadscrew follower (3), and a cylindrically shaped leadscrew shell (10), the leadscrew shell having an annular thickness of 1 to 20% the thread diameter. Accordingly, a screw device having a ratio of annular thickness of a shell to the thread diameter of 1% (.01) meets the claim limitation.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 3682

4. Claims 4, 5, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over at least one of Ogata (JP 6-264985) or Mizuno (JP 8-129938).

Ogata teaches a screw device having a leadscrew follower (2), and a cylindrically shaped leadscrew shell (5) formed on a leadscrew, the leadscrew shell having an annular thickness of 10 μ m.

Ogata does not teach the cylindrical diameter of the screw, however it was known in the art to vary the diameter of the screw in order to have a predetermined operating capacity. For example, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the screw of Ogata with a diameter of 25 mm in order to have a predetermined operating capacity and operating size. Accordingly, a screw having a diameter of 25 mm and an annular shell having a thickness of 10 µm meets the claim ratio of annular thickness to cylindrical diameter in the range of .004 to .01.

Alternatively Mizuno teaches a screw device having a leadscrew follower (5b), and a cylindrically shaped leadscrew shell (8) formed on a leadscrew (5a), the leadscrew shell having an annular thickness of 5 to 13 µm.

Mizuno does not teach the cylindrical diameter of the screw, however it was known in the art to vary the diameter of the screw in order to have a predetermined operating capacity. For example, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to form the screw of Mizuno with a diameter of 25 mm in order to have a predetermined operating capacity and operating size. Accordingly, a screw having a diameter of 25 mm and an annular shell having a thickness of 10 µm meets the claim ratio of annular thickness to cylindrical diameter in the range of .004 to .01.

Note, the limitation "electroless deposited" in claim 18 has been given limited patentable weight because an apparatus claim must define over the prior art in terms of structure and not the method of making the device.

Allowable Subject Matter

5. Claims 21-26 are allowed.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the screw shell M of Suzuki (JP 62-159852).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (571) 272-7107. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/811,561 Page 5

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William C. Joyce/ 7/7/08 Primary Examiner, Art Unit 3682